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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER STEPHENS, JACQUELINE F				
ART UNIT			PAPER NUMBER	
3761				

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/037,472

Applicant(s)

KRAUTKRAMER ET AL.

Examiner

Jacqueline F Stephens

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12-17, 21-30, 34-41 is/are rejected.
- 7) ☒ Claim(s) 9-11, 18-20 and 31-33 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/17/03, 6/25/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claim 30 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 30 restates the thermoplastic fibers are meltblown fibers, which is also required by independent claim 25.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 1, 4, 5, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tan et al. USPN 5916670 in view of Baer et al. USPN 5728081 and further in view of Chmielewski USPN 5891120.

As to claim 1, Tan discloses an absorbent article, such as a diaper, which is well known in the art to have a liquid-permeable cover, and liquid impermeable baffle, and an absorbent core between the cover and baffle. The invention of Tan further comprises a composite absorbent member having a first layer positioned between second and third layers, the first layer and said second and third layers each containing pulp fibers, wherein the weight percentage of pulp fibers within said first layer is greater than the weight percentage of pulp fibers within said second layer and the weight percentage of pulp fibers within said third layer (Figure 2 and col. 10, lines 39-60). Tan does not disclose the average diameter of the pores within said first layer is smaller than the average diameter of the pores within said second layer and said third layer. However, Baer teaches absorbent structures with a pore gradient where the average diameter of pores in a first layer is smaller than the average diameter of pores in a second layer for the benefit of allowing rapid absorption and distribution of repeated insults of liquid and to allow sufficient time for the core (storage layer) to permanently absorb liquids (Baer col. 1, lines 28-31). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Tan to have the average diameter of the pores within the first layer smaller than the average diameter of the pores within the second layer for the benefits disclosed in Baer.

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Tan/Baer disclose the present invention substantially as claimed. However, Tan/Baer do not specifically teach a smaller pore size in the third layer. Chmielewski teaches an absorbent with a first layer between second and third layers. Chmielewski teaches the second and third layers should have minimal liquid retention capabilities so that liquid is wicked back into the first (storage) layer. To achieve this, Chmielewski teaches a porous, less dense third layer relative to the first layer (Chmielewski col. 4, lines 58) for the benefit of providing means for transferring a liquid, such as urine, that permeates the lower layer from the absorbent core to the lower surface of the absorbent core. Based on the teachings of Chmielewski and Baer, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Tan to have a third layer with a larger pore size than the first layer for the benefits disclosed in Chmielewski.

As to claims 4 and 5, Tan/Baer/Chmielewski disclose the amount of pulp fibers present within said first layer is at least about 25% by weight greater than the amount of pulp fibers present within said second layer and said third layer (Tan Figure 1).

As to claims 12 and 13, Tan/Baer/Chmielewski disclose the basis weight of said composite absorbent member is from about 150 grams per square meter to about 250 grams per square meter (Tan col. 8, lines 17-24).

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5. Claims 14, 15, 21-27, 34-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tan/Baer/Chmielewski and further in view of Allison USPN 4531945.

As to claims 14 and 25, Tan/Baer/Chmielewski disclose the present invention substantially as claimed. However, Tan/Baer/Chmielewski do not disclose the layers comprise thermoplastic meltblown fibers. Allison discloses the use of thermoplastic meltblown fibers to increase the wicking of the layers (Allison col. 2, lines 5-8). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Tan/Baer/Chmielewski to incorporate meltblown fibers for the benefits taught in Allison. Regarding claims 14 and 25, the combination of Tan/Baer/Chmielewski discloses the absorbent article as claimed. With respect to the limitations of: the cover, baffle, absorbent core, pulp and pore size, the applicant is directed to paragraph 4 above where the examiner has set forth in Tan/Baer/Chmielewski where the above limitations are found.

As to claims 15, 26, and 27, see Tan Figure 1.

As to claims 21 and 22, Tan/Baer/Chmielewski disclose the basis weight of said composite absorbent member is from about 150 grams per square meter to about 250 grams per square meter (Tan col. 8, lines 17-24).

As to claims 23 and 24, Tan/Baer/Chmielewski disclose the sanitary napkin has a caliper less than about 15 millimeters and less than about 5 millimeters (Tan col. 10, lines 25-31).

As to claims 34 and 35, Tan/Baer/Chmielewski disclose the basis weight of said composite absorbent member is from about 150 grams per square meter to about 250 grams per square meter (Tan col. 8, lines 17-24).

As to claims 36-39, Tan/Baer/Chmielewski disclose multiple strata embodiments, any of the layers would serve to intake fluids (Tan col. 10, lines 1-14). An absorbent article as defined in claim 25, wherein said absorbent core further comprises an intake member. Additionally, Tan discloses variance in superabsorbent materials between the layers (col. 10, lines 1-14). Those layers without superabsorbent or a minimal amount of superabsorbent may absorb some fluid prior to wicking to the retention layer(s), hence serving as a delay member.

As to claims 40 and 41, Tan/Baer/Chmielewski disclose the sanitary napkin has a caliper less than about 15 millimeters and less than about 5 millimeters (Tan col. 10, lines 25-31).

6. Claims 1-3, 6-8, 14-17, 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allison USPN 4531945.

As to claims 1, 14, 15, 25-27 Allison discloses a composite absorbent member comprising a first layer 14 positioned between second and third layers 13 and 16,

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respectively. Allison teaches the second and third layers can contain pulp for some level of fluid retention (col. 3, lines 33-36). The layer 14 is the absorbent layer. Allison does not specifically teach it has more pulp, however, Allison teaches this layer is for absorbent purposes and it is old and well known, and therefore obvious to one having ordinary skill in the art to modify this layer with more absorbent material. Allison teaches the layers 13 and 16 have larger capillaries than the layer 14 (col. 2, lines 49-55; col. 3, line 65 through col. 4, line 3).

As to claims 2, 3, and 30, Allison discloses the first, second, and third layers each contain thermoplastic fibers (col. 3, lines 27-29 and line 52).

As to claims 6-8, 16, 17, 28, and 29, Allison does not specifically disclose the difference in pore size between the layers. However, Allison recognizes the pore size can be varied and this will affect wicking and fluid retention (col. 2, lines 43-46; col. 3, lines 28-50 and col. 3, line 65 through col. 4, line 3). Allison, therefore recognizes the fluid transfer and retention is a result effective variable of pore gradient. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the article of Allison with the claimed difference in pore sizes, since discovering an optimum value of a result effective variable involves only routine skill in the art.

Allowable Subject Matter

7. Claims 9-11, 18-20, and 31-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The claim(s) are considered definite because the examiner cannot show by clear and convincing evidence that one of ordinary skill in the art upon consulting the specification would not be able to determine the scope of the claim(s). See in general; W.L. Gore & Associates 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. Denied, 496 U.S. 851 (1984).

The claim(s) are considered patentable over the prior art of record as the examiner cannot show by clear and convincing evidence that the functional or characteristic limitation claimed necessarily flows and/or is inevitably present in the teachings of the prior art of record. There are other attributes undisclosed in the prior art that necessarily affect the functional or characteristic claimed; therefore, the application of prior art is not warranted. See *Ex parte Latimore*, (Bd. Pat. App. & Inter. 3/21/1994), *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline F Stephens whose telephone number is (703) 308-8320. The examiner can normally be reached on Monday-Friday 9:00-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on (703)305-1025. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jacqueline F Stephens
Examiner
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A handwritten signature in black ink, appearing to be 'JF Stephens', written over the printed name.

June 27, 2004